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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE 08/499,423 07/07/95 CAMPBELL Ċ MP/84 **EXAMINER** TM02/0228 WAYNE D HOUSE ART UNIT PAPER NUMBER W L GORE AND ASSOCIATES INC 551 PAPER MILL ROAD P 0 BOX 9206 2165 NEWARK DE 19714-9206 DATE MAILED: 02/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No. 08/499,423 Applicant(s)

Examiner

Campbell

Michael Milano

Group Art Unit 2165



X Responsive to communication(s) filed on Sep 29, 2000	•
☐ This action is FINAL .	
 Since this application is in condition for allowance except for formal in accordance with the practice under Ex parte Quayle, 1935 C.D. 	al matters, prosecution as to the merits is closed 11, 453 O.G. 213.
A shortened statutory period for response to this action is set to expir is longer, from the mailing date of this communication. Failure to respapplication to become abandoned. (35 U.S.C. § 133). Extensions of 37 CFR 1.136(a).	oond within the period for response will cause the
Disposition of Claims	
X Claim(s) 1-35 and 42-97	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
☐ Claim(s)	is/are allowed.
X Claim(s) 1-35 and 42-97	
☐ Claim(s)	
☐ Claims	
Application Papers ☐ See the attached Notice of Draftsperson's Patent Drawing Review	ew PTO-948
☐ The drawing(s) filed on is/are objected to	
☐ The proposed drawing correction, filed on	is Eapproved Edisapproved.
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for foreign priority under	
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the p	priority documents have been
received.	
☐ received in Application No. (Series Code/Serial Number)	
received in this national stage application from the Intern	
*Certified copies not received:	
☐ Acknowledgement is made of a claim for domestic priority under	er 35 U.S.C. § 119(e).
Attachment(s)	
✓ Notice of References Cited, PTO-892	
Information Disclosure Statement(s), PTO-1449, Paper No(s).	
☐ Interview Summary, PTO-413	
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	
☐ Notice of Informal Patent Application, PTO-152	
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SEE OFFICE ACTION ON THE FO	OLLOWING PAGES

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Continued Prosecution Application

1. The request filed on September 29, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/499,423 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Isaac, 3,081,773. Isaac teaches the use of an article comprising a polymeric tube 20 having a circumference which increases with internal pressure up to a second circumference, thereafter the tube limits further growth in circumference with an increasing internal pressure. It should be noted that once the elastic limit of the balloon is reached, the balloon will limit further growth in circumference with an increasing internal pressure up to a rupture pressure.

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- 4. Claims 1 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Fogarty, 3,435,826. Fogarty teaches the use of an article comprising a polymeric tube 20 having a circumference which increases with internal pressure up to a second circumference, thereafter the tube limits further growth in circumference with an increasing internal pressure. It should be noted that once the elastic limit of the balloon is reached, the balloon will limit further growth in circumference with an increasing internal pressure up to a rupture pressure.
- 5. Claims 1-5, 24-30, 33-35, 42-49, 51-55, 57-61,63-67 and 69-97 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee, 5,123,917. The expansion limit of the stent-graft tube is reached due to the limit of expansion of the stent. The stent will permit only a predetermined expansion due to the stent configuration and structure. Additional application of internal pressure will not expand the stent-graft tube. The device does not appear to have a recoil so the "or less" limitation is met by the zero (0) recoil of the tube.
- 6. Claims 1,2,5,24-30,33-35,42-48,51-54,58-60,63-66, 69, 70, 72, 74, 76, 78, 80, 82, 84 and 86-97 are rejected under 35 U.S.C. 102(b) as being

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anticipated by Rhodes, 5,122,154. The expansion limit of the stent-graft tube is reached due to the limit of expansion of the stent. The stent will permit only a predetermined expansion due to the stent configuration and structure. Additional application of internal pressure will not expand the stent-graft tube. The device does not appear to have a recoil so the "or less" limitation is met by the zero (0) recoil of the tube.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 6-16, 18,19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee ('917) in view of Eilentropp, 4,791,966. Lee teaches all aspects of the claimed invention except for the helical wrapped PTFE layer. The Lee outer layer is a porous PTFE tube applied over the inner tubular layer and stent. Eilentropp teaches a PTFE tube formed by a helical layer of wrapped PTFE material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the outer layer of Lee of helically wrapped PTFE as taught by Eilentropp,

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because the helical layered tube would have been merely an alternate and analogous method of forming a tube on the Lee device.

- 9. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee ('917) in view of Eilentropp ('966) as applied to claim 14 above, and further in view of Summers ('445). The difference between the modified Lee device and the claimed invention is the use of a branched stent-graft with three ends. Summers teaches the use of a stent which can have a straight or branched configuration depending on the vessel that is to be supported. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the modified Lee stent-graft with a branched, three end configuration, because the branched configuration would have enabled the stent-graft to support and repair a branched vessel as taught by Summers. It should be noted that the branched, three end configuration would inherently form a larger and smaller end on the stent-graft (i.e., tapered tube between first and second ends).
- 10. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee ('917) in view of Summers, 5,607,445. The difference between Lee and the claimed invention is the use of a branched stent-graft with three ends. Summers teaches the use of a stent which can

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have a straight or branched configuration depending on the vessel that is to be supported. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the Lee stent-graft with a branched, three end configuration, because the branched configuration would have enabled the stent-graft to support and repair a branched vessel as taught by Summers. It should be noted that the branched, three end configuration would inherently form a larger and smaller end on the stent-graft (i.e., tapered tube between first and second ends).

11. Claims 20, 50, 56, 62 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee alone or Lee in view of Eilentropp. The difference between Lee and the claimed invention is the use of sutures to secure the stent-graft. The Examiner takes Notice that sutures would have been well known in the art at the time of the invention to secure a graft or stent-graft to a vessel to prevent migration of the device within the vessel. Therefore, it would have been obvious to one of ordinary skill in the art to have used sutures for enhanced securement of the Lee stent-graft to the vessel.

Response to Arguments

12. Applicant's arguments filed 9/29/00 have been fully considered but they are not persuasive.

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Conclusion

13. Any inquiry concerning this communication should be directed to Michael Milano at telephone number (703) 308-2496.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group 3700 Receptionist whose telephone number is (703) 308-0858.

Milano.mm February 13, 2001

> Michael J. Milano Primary Examiner Group 2100, AU 2165